



"Every Day is Earth Day on the Farm"

FWA

Family Water Alliance

DWR WAREHOUSE

SEP 28 AM 11:43

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P. O. Box 365, Maxwell, California 95955

CALFED BAY-DELTA PROGRAM

**SMALL FISH SCREEN DIVERSION PROJECT
ON THE SACRAMENTO RIVER**

BY

FAMILY WATER ALLIANCE

JULY 1997

I. a) Project Title and Applicant - As noted above

b) Project Description and Primary Biological Objectives:

This project will assist in the restoration of anadromous species on the Sacramento River. There will be a special emphasis on Winter-run, and Spring-run Chinook Salmon, as well as other salmonids, and priority species. This will be accomplished through the screening of small agricultural diversions on the Sacramento River in northern California. This will be a cooperative effort between landowners, USDA Farm Service Agency, Natural Resources Conservation Services, California Fish and Game, National Marine Fisheries Service, and Family Water Alliance.

The final product will be the installation of 10 fish screens (20cfs average) on the Sacramento river within the next 18 months, depending on funding availability, weather, and water conditions.

c) Approach/Tasks/Schedules:

The screening of small agricultural diversion will be a cooperative project with private landowners, State, and Federal agencies in Colusa, and Glenn Counties. The long-term project objective is expansion up and down the entire Sacramento River, and its major tributaries.

Three major tasks will be performed under this grant. The first will consist of outreach and education, to educate the public, and landowners along the river regarding fishery issues, and encourage them to participate in the program. The second will consist of the actual screening of the diversions. The third will involve the monitoring of the fish screens to determine effectiveness, and apply adaptive management techniques (modifications to screens as necessary). The estimated time to complete the screening will be three years.

d) Justification for Project and Funding by CALFED:

CALFED should fund this project because of the critical need to restore the fishery population. This restoration project will involve voluntary partnerships between agencies, and private landowners. While large diverters have screened their intakes, small diverters have been hesitant to do so because of fear of government over-regulation, and lack of funds. Family Water Alliance will be a major contributor to the success of this program because it is an organization rooted in the agricultural base of

the community. FWA's support will help to reassure farmers of the importance of screening, assist in project management, such as fund raising, and coordinate logistics, and permits.

This proposal meets CALFED criteria in all seven areas. This project addresses CALFED priority species such as all salmonoids, splittail, steelhead trout, and striped bass. FWA has already implemented a pilot screening program on the Sacramento river. Five screens should be in place this fall, pending the permitting process, and approval of screen design. Expansion of the project to two years is appropriate due to time constraints of screen designs, and permits. Local farmers will participate in 1/3 cost of the screen project. Local NRCS will assist in the screen design to meet CDF&G specifications. Reasonable cost estimates will be based on \$2,000/cfs, but may be less if prefabricated designs can be applied. Monitoring, assessment, and reporting will be done.

e) Budget Costs and Third Party Impacts:

This proposal is a three year project. The total cost of the project will be \$1,357,207. Pending in-kind funds of \$200,000 from the landowners, committed funds \$60,000 CDF&G, and \$80,000(+) from NF&WF totaling \$320,000 in-kind funds.

There will only be positive third party impacts as this project will create jobs, and place earned revenues in local communities, as well as support the fishing industry both sport, and commercial.

f) Applicant Qualifications:

Family Water Alliance qualifies for this program as we have initiated the pilot project, and have all the cooperating entities in place to meet the ecological and biological goals within the target area.

g) Monitoring and Data Evaluation:

A monitoring program will be implemented to assess the success of the screens, and recommend any modifications to improve screen effectiveness. This program will meet CDF&G requirements.

h) Local support/Coordination with other Programs/Compatibility with CALFED objectives:

FWA has the support and co-ordination of local farmers, Colusa County NRCS, Colusa County FSA, as well as California Department of Fish and Game, California State FSA, and NRCS, U.S. Army Corp of Engineers, National Marine Fisheries, National Fish and Wildlife Foundation, and the Mary Crocker Trust.

Family Water Alliance will be a major contributor to the success of this program as it has the support and ear of the community. This proposal meets CALFED objectives in that it: 1.) address non-flow factors that impact the Bay-Delta ecosystem, specifically unscreened diversions, 2.) Focuses on high risk species.

II. SMALL FISH SCREEN DIVERSION PROJECT ON THE SACRAMENTO RIVER

by

FAMILY WATER ALLIANCE
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Maxwell, CA 95955
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Susan A. Sutton
President

501(C)3 Educational Organization

Tax Id.# 680262939

Susan A. Sutton
or
Rita M. Trainer

Collaborators in Implementation:
Colusa County Farm Service Organization
Colusa County NRCS
California NRCS
California Department of Fish and Game
California FSA
National Marine Fisheries Service
National Fish and Wildlife Foundation
Mary Crocker Trust
U. S. Army corp of Engineers

Project Type:
Services/Pre-construction/Construction

III. Project Description

a) Project Description and Approach:

OBJECTIVE:

The objective of this proposal is to assist farmers in the screening of 10 small diversions that average 25 cfs on the Sacramento river, as well as assisting in the project management of the overall project.

Methodology:

The small screening project will be a cooperative effort between: individual landowners, U.S.D.A. Farm Services Agency, Natural Resources Conservation Services, Family Water Alliance, California Department of Fish and Game, and National Marine Fisheries Service.

Cost share:

The cost share will be broken down into approximately the following shares:

2/3¹ ACP, Prop 70, NF&WLF, Prop 204, or other funds

1/3 Farmer

Total Cost

Each of these organizations will contribute to the project in the following ways:

Family Water Alliance -

- *develop outreach to individual farmers, and assist in recruitment of landowners
- *provide overall project management
- *assist in obtaining all State and Federal permits
- *oversee implementation of monitoring program
- *develop an Internet web page to enhance education, and outreach regarding the fish screening project
- *develop partnerships with other groups, and organizations to assist in supporting the project
- *coordinate project needs with the landowner
- *identify and obtain additional funding sources
- *implement expansion phase

¹If CALFED funds are dedicated to this project we will attempt to get matching funds from another source and screen more pumps.

Farm Services Agency -

*may provide cost share dollars (one third) to assist landowners with installation of fish screens. Funding will be limited to \$3,500 per individual if available.

*assist with the recruitment of landowners

Natural Resources Conservation Service -

*provide technical assistance to the landowner

*co-lead agency regarding environmental documents(pending)

*provide design specifications for the fish screen

*provide on site assistance during installation

*provide detailed operation and maintenance schedules

*certifying the completion of projects for FSA funding purposes (if applicable).

*carrying out annual follow up and maintenance inspections

California Department of Fish and Game -

*may provide approximately one-third share of cost to install fish screens, utilizing funding from Proposition 70 funding, or other funding sources

*provide design review and assistance

*co-lead agency regarding environmental documents(pending)

*provide project consultation

*issue permits

*work with FWA to streamline permitting process

*assist the landowner in determining the overall environmental aspects of the project

*assist in prioritizing projects to be screened

National Marine Fisheries Service -

*provide assistance with design review

*determine the adequacy of the screen project in relation to fish protection

*provide project consultation as needed

*provide an incidental take permit and shelf life assurances to the diverter

Landowner -

*provide approximately one third share of project cost in the form of in kind labor, materials, equipment, etc.

*will be responsible for competitor's bids, and the actual installation of screen.

*operate and maintain the installed screen for the identified shelf life (10 years assuming screen meets fish criteria as well as diversion needs).

*permit authorized agency personnel to access the screen site for the purposes of project design and project review.

*allow other landowners access for the purpose of field trips, education, etc.

Note: All agencies will respect the private property rights of the landowners, and work with the landowners in a cooperative manner.

SCHEDULING

This phase of the screening project will commence with the availability of funding, assumes January 1998.

Outreach/sign-ups:	1/98 - 8/99
Screen Designs & installation:	6/98 - 12/99
Monitoring:	1/99 - 12/00
Expansion:	6/98 - ongoing

The installations will occur during periods of time when water diversions will not be interrupted, and weather, and flow/fishery conditions allow.

The long term goal is to install approximately 10 to 30 screens per year, however, the preceding schedule, and expansion of this project will be predicated upon the funding available.

b) Location:

Diversions will be located along the boundaries of the Colusa Basin in the Sacramento River within the Sacramento river watershed. Focus will be in Glenn and Colusa Counties, however, diversions outside that area will be considered (See map).

c) Expected benefits:

This project will assist in the restoration of anadromous species on the Sacramento River with special emphasis on Winter-run and Spring-run Chinook Salmon, as well as other salmonids, and priority species such as steelhead trout, splittail, and striped bass.

The primary benefit will be the saving of juvenile fish, and result in the increase of the populations of multiple species of fish. Entrainment is the main stressor to these fish populations due to unscreened diversions. CDFG has concluded: "Individually, most of the small diversions do not destroy many young salmon and steelhead. Collectively, however, they take considerable numbers." (Hallock and Van Woert 1959)² This project will address the cumulative effect of small diversions on fish, and with expansion will have a major impact on saving fish, and increasing fish populations.

Benefits to this program will be broad based as it will not only benefit third parties, but directly support numerous fishery restoration projects such as CVPIA restoration. Third parties will benefit as new work will be generated from screen installations i.e. screen steel manufacturers.

d) Background and Biological/Technical Justification:

The Sacramento River traditionally produces some of the largest runs of King salmon of any west coast river system. However, over recent years we have noted significant declines in Winter-run and Spring-run stocks, to the point that under state and federal law Winter-run has been listed as an Endangered Species, and the Spring-run has been listed as Candidate under the State Endangered Species Act. The apparent causes for these declines are numerous including: ocean conditions, over fishing, large diversions, dams, street runoff (water quality), and increased pressure from population growth, and its effect on watersheds, and habitat. While these have been identified as the larger problems, the diversion of irrigation water by small diversions can result in the loss of juvenile fish as well.

Currently, efforts are being taken to screen all the major diversions on the Sacramento river, and its major tributaries. This activity has been identified as a high priority by fishery interests including: California Department of Fish and Game, U.S. Fish and Wildlife, National Marine Fisheries Service, Commercial and Sport fishing organizations, and other State and Federal Agencies. However, there has been no concerted efforts to address the screening of small diversions.

² Hallock, R.J. And W.F. Van Woert. 1959. A survey of anadromous fish losses in irrigation diversions from the Sacramento and San Joaquin Rivers. Calif. Fish and Game 45:227-296

Farmers along the Sacramento river, in both Glenn and Colusa counties (see attached map), would be served during this project with a goal of expanding to other counties adjacent to the Sacramento River. Long term objectives would include expansion to San Joaquin river counties, and the Sacramento/San Joaquin River Delta.

This project will be the beginning of a long term project to screen diversions, and follows the pilot project currently being implemented (five screens on the Sacramento River). Currently, approximately \$175,000 has been dedicated to this project from state, and federal funds, and \$48,000 from private landowners for a total of \$223,000. For Phase II of the ongoing project CA Fish and Game has dedicated \$60,000, an additional \$80,000 is currently pending final approval from National Fish & Wildlife Foundation.

e) Scope of Work:

1. Education and Outreach/Sign-ups - 1/98 - 8/99

The purpose for education and outreach is to educate the landowners, and others regarding the purpose, and value of screens. This will not only address the value to the fishery, but the value to the landowners. This outreach will help recruit diverters into the program. Education will be enhanced by an on-line Internet web page that will address the salmon recovery issue, specifically, this small diversion screening project. In addition, Education and Outreach will include participation in various fishery conferences in an effort to share information regarding interrelated concerns between farming, and fishery issues, and the screening project (see attached sample of FWA Fish Forum).

2. Fish Screen Design and Installation - 6/98 - 12/99

The screen project involves the installation of fish screen devices on existing pumps(see attached sample screen designs). The overall goal will be to install 10 screens and if matching funds can be identified an additional 10 screens will be added for a total of 20 screens. All screens will comply with CDF&G screening criteria, and all other applicable codes, laws, and regulations. All permits will be obtained prior to installation.

3. Maintenance/Monitoring -1/99 - 12/00

On-going maintenance/monitoring will identify external factors that have an effect on the pumping facility i.e. logs, silt, boating activities, and etc. Maintenance of the pumps will include determining the benefits to the producer, such as pumping cost effectiveness, as well as overall pump maintenance. Monitoring will review the effectiveness of the screen in relation to fisheries protection, and make recommendations for modifications as need.

4. Expansion - 6/98 - ongoing- As funding is identified.

If found successful in Colusa and Glenn Counties, expansion of the project will be the next objective. Expansion will include education, outreach, promotion, and eventually screen installation in adjacent

counties along the Sacramento River, the San Joaquin River, and Bay-Delta. Project expansion will be predicated on funding availability.

5. Reporting

Programmatic and financial reporting will be done quarterly. Programmatic reports will capsulize the key accomplishments of the project to date. Financial reports will outline cumulative receipts and expenditures and expense information will be made in comparison to the approved budget.

f) Monitoring and Data Evaluation

Monitoring will be conducted by an outside consultant. Monitoring will include: underwater inspection to determine site specific conditions, the presence/absence of predator species, water velocity in the vicinity of the screen, and impacts of a range (low, medium, high) of pumping conditions, if applicable. The cost to monitor each site will range from \$1,500 (2-3 cfs) to \$5,000 (larger diversions). For purposes of the budget the higher figure will be used at \$5,000 per site. (\$5,000/site x 10 sites = \$50,000) Unused funds will be redirected towards new screens.

g) Implementation

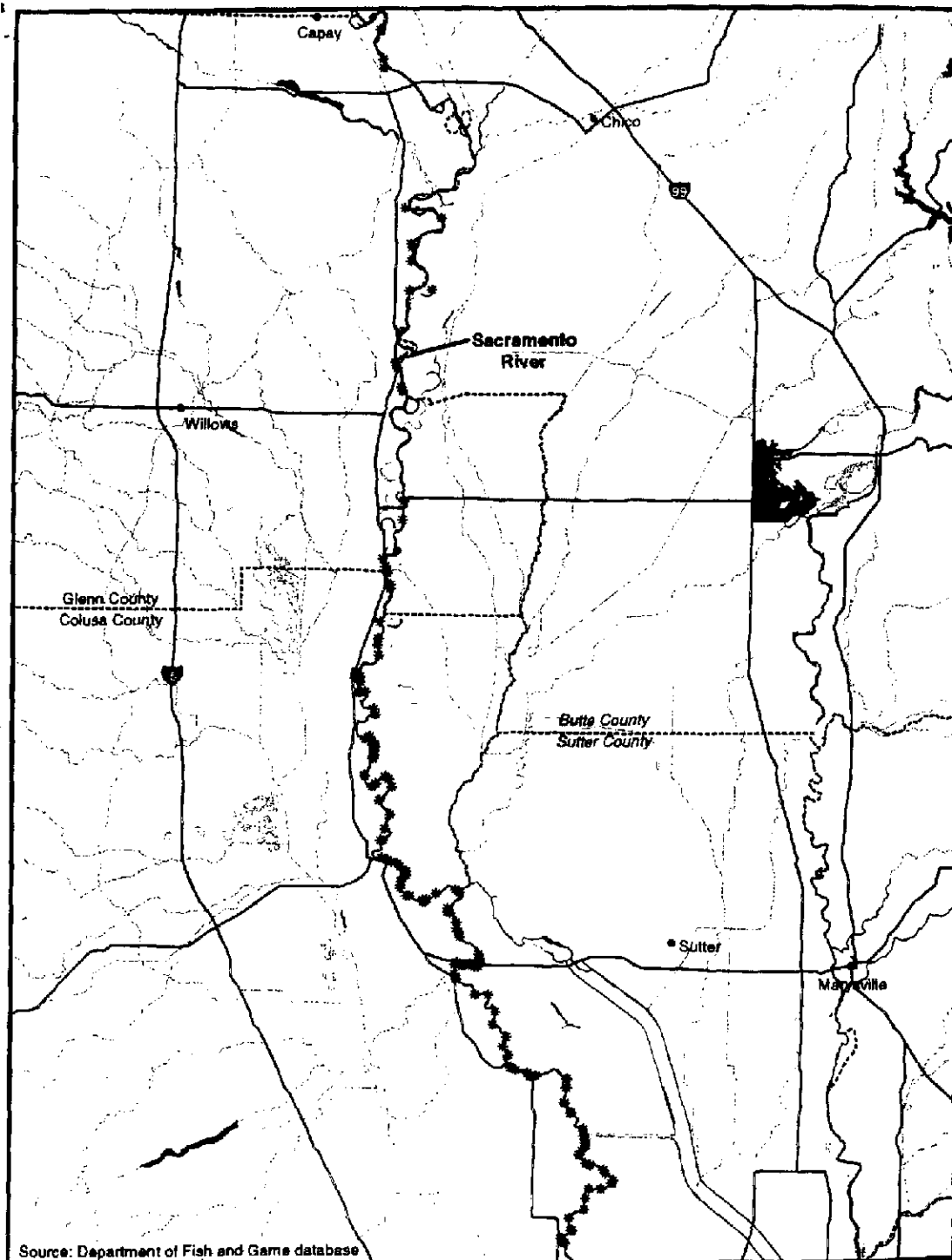
All State and Federal laws, and permits will be obtained to meet environmental compliance such as NEPA, CEQA, 1600's Fish and Game permits, and Corp permits. Local landowners will participate on a volunteer basis, and cost share in the funding. FWA already has a large network to successfully conduct outreach, and encourage participation through a newsletter, Internet access, and local contacts.

Co-operating Entities:

- Colusa County Farm Service Organization
- Colusa County NRCS
- California NRCS
- California Department of Fish and Game
- California FSA
- National Marine Fisheries Service
- National Fish and Wildlife Foundation
- Mary Crocker Trust
- U. S. Army corp of Engineers

Contributing Entities:

- California Department of Fish and Game
- National Fish and Wildlife Foundation
- Mary Crocker Trust



**Locations of Existing Unscreened Diversions in
Middle Sacramento River**



FWA WORKS TO SAVE FISH!

The Family Water Alliance has taken the position that we must have fish in the river. As long as there are fish in the river, there will be farmers on the land, and the two can coexist. The fish screen project is only one of many attempts of the FWA to support salmon recovery. They started the Spring Run Committee to help in salmon recovery planning, and are developing other working coalitions that address specific issues, and identify common sense solutions with agriculture, fisheries, and environmental interests.

The FWA have supported such things in the past as experimental screw pumps, spawning bed restoration, and the restoration of the Chico Creek. They have attended the State River Conference, and other conferences to keep themselves informed on numerous fish issues. They have outreached to build coalitions and facilitate meetings between farmers, fishermen and forester for who salmon recovery - FFEC process. FWA hopes that these efforts will help them one day reach their goal that fishermen, farmers, and environmentalists all work together, so that farmers can farm, and fishermen can fish.

FWA Helps Fish And Farmers

To help farmers and save salmon, Family Water Alliance is embarked on a long term proactive project to assist farmers with the screening of small agricultural diversions on the

Sacramento River. Sue Sutton, FWA President, notes, "We have always been committed to the resource, and feel that on-the-ground projects such as this one, reinforce the FWA philosophy that 'If there are fish in the river, there will be water on the land.'"

This year, FWA will assist in the screening of up to six diversions. Currently, all screens are located in Colusa County. However, the scope of this project will expand to assist farmers from Sacramento north to Shasta Dam, with plans to involve nearby rivers, and tributaries in the future. An outreach, and educational component is also part of the over - all program.

Currently, five farmers are voluntary participants in the screening program, and will also take part in the cost sharing, installation, and monitoring elements of the program. The farmer will contribute approximately one-third of the cost, and the balance will be shared by California Department of Fish and Game, the Farm Service Agency, and National Fish and Wildlife Foundation. This is an opportunity for farmers to screen a diversion ahead of the NMFS requirement.

PUMPS AND SCREENS

This project is dedicated to screening small agricultural diversions on the Sacramento River. The size and type of pump varies with each project. Pumps range in size from 1 cfs to 37.6 cfs and include vertical, slant, and submersibles. Since no two

pumps or sites are the same, engineering specifications will vary to meet the need of the design criteria. All screens will comply with



the Department of Fish and Game's "Fish Screening Criteria," all applicable Fish and Game Code Sections, and other applicable laws, and regulations. All state and federal permits will be obtained prior to installation.

COOPERATIVE EFFORT

This effort is a cooperative one with farmers, Family Water Alliance and numerous State and Federal agencies that include: California Department of Fish and Game, Colusa County Farm Service Agency, Colusa County Natural Resource Conservation Service, National Marine Fisheries Service, U.S. Army Corp of Engineers, California State FSA, and NRCS as well as the National Fish and Wildlife Foundation, and the Mary Crocker Trust.

Continued on back page --

General Life History Of The Chinook Salmon

Prepared By:

David A. Vogel, Senior Fisheries Biologist/Task Manager
Keith R. Marine, Fisheries Biologist/Aquatic Ecologist

The chinook salmon, or king salmon as it is commonly referred to in California, has the broadest geographic range of any of the Pacific salmon species. Runs of chinook salmon are found throughout the northern Pacific Ocean and tributary drainages around the Pacific Rim from northern Japan to southern California. In spite of its wide distribution, the chinook salmon is the least abundant of all the Pacific salmon species. The chinook salmon as a species is distinguished by its highly variable life history, and many rivers have more than one distinct stock identifiable by their unique life history patterns.

The life span of chinook salmon may range from 2 to 7 years. Chinook salmon will spend from 1-1/2 to 5 years feeding and roaming in the ocean before maturing and returning to their natal streams to spawn. Both life span and the timing of spawning migrations are primarily genetically controlled. All chinook

salmon die upon completion of spawning.

The eggs are laid in nests, referred to as redds, excavated by the female in uncompacted gravel. Appropriate gravel beds selected by female chinook salmon consist mainly of gravel ranging in size from 1 to 6 inches in diameter. Optimal survival of eggs and pre-emergent fry occurs when the largest fraction of the redd is composed of the smaller-sized gravel. The female will seek out gravel beds with water depths and velocities sufficient for spawning activities and egg incubation. Depths where chinook salmon redds may be located range from shallow riffle areas (0.5 to 2 feet deep) to deep runs or glides (5 to over 20 feet deep). Spawning depth is a function of physiological requirements, available habitat, and specific preferential differences between stocks of salmon, probably under genetic influence. For instance, some winter-run chinook salmon have been observed to spawn on gravel in deeper water than the other three Sacramento River salmon runs. Preferred spawning velocities are generally in the range of 1.5 to 2.5 feet per second just above the surface of the gravel bed.

As the female lays the eggs in the redd, one or more male salmon fertilize the eggs. The female subsequently buries the eggs in the redd by displacing gravel upstream of the redd onto the eggs.

Eggs hatch after a variable incubation period dependent on water temperature, but is generally about 40 to 60 days. Maximum

survival of incubating eggs and pre-emergent fry occurs at water temperatures between 40°F and 56°F. The newly hatched larvae, or pre-emergent fry, will remain in the redd and absorb the yolk stored in their yolk-sac to grow into fry. This period of larval incubation will last approximately 2 to 4 weeks depending on water temperatures. The fry then wiggle their way out of the redds, up into the water above. The fry will seek out shallow nearshore areas with slow current and vegetative and/or boulder cover nearby where they begin to feed on insects and crustaceans drifting in the current. As they grow, the juvenile salmon (approximately 50 to 75 mm in length) move out into deeper, swifter water for rearing, but continue to remain near boulders, fallen trees, and other such cover to reduce chances of being preyed upon and minimize energy expenditure. Juvenile salmon may emigrate downstream toward the estuary at any time from immediately after they emerge from the redd to after spending over one year in freshwater. The length of juvenile residence time in freshwater and estuaries varies between salmon runs and depends on a variety of factors including season of emergence, riverflow, turbidity, water temperature, and interactions with other species.

Excerpt from report: U.S. Bureau of Reclamation Central Valley Project, Guide to Upper Sacramento River Chinook Salmon Life History, July 1991, prepared by David A. Vogel & Keith R. Marine.

FWA Works—

Continued from front page —

PARTICIPATION

Any farmer or diverter wishing to participate in this program should contact Family Water Alliance at (916) 438-2026, or send a letter of interest to Family Water Alliance, P.O. Box 365, Maxwell, CA 95955.

Special Thanks!

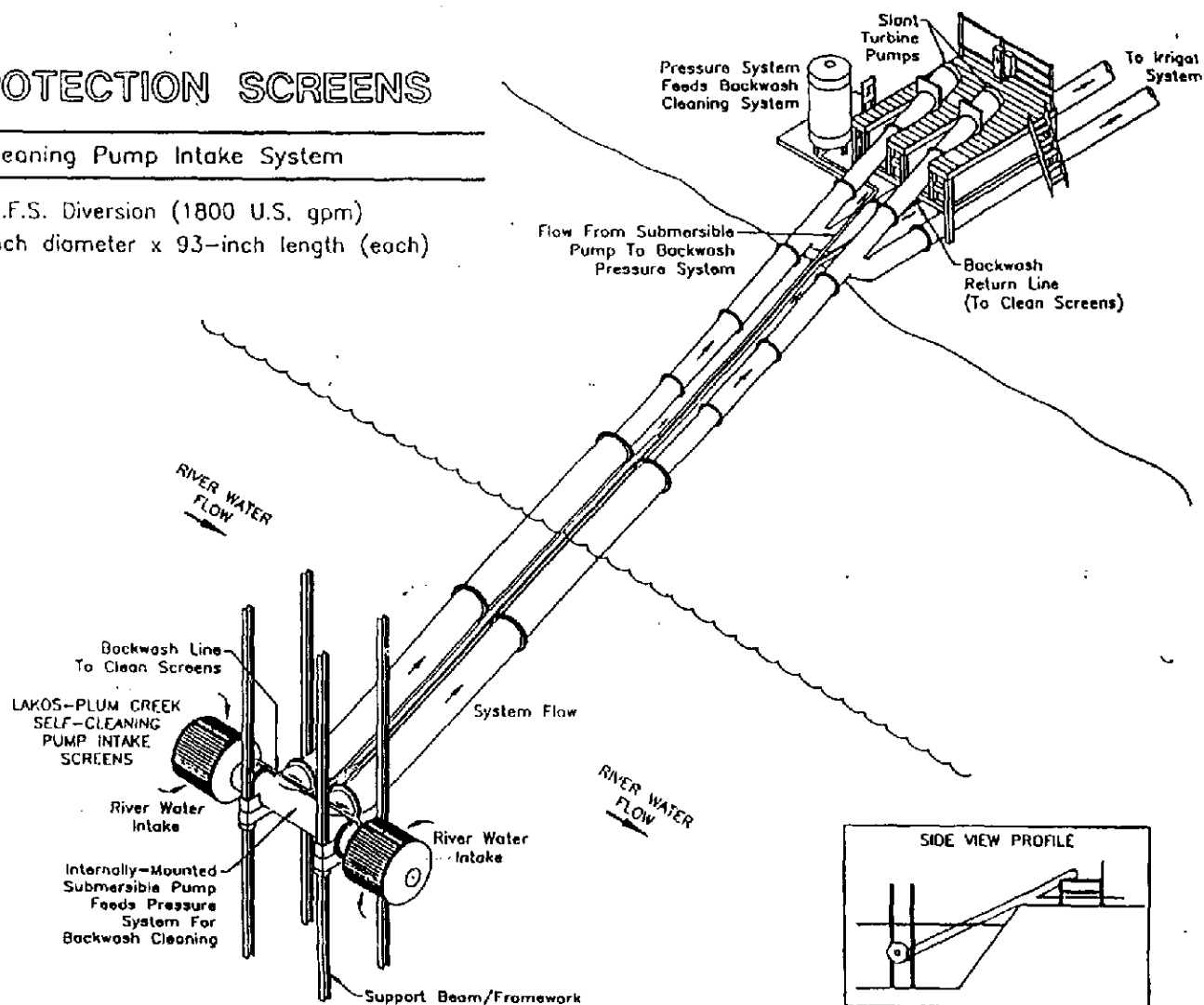
Ken Woods, Tedd Mehr, Jerry Rippen, Rich Lorenz, Rich Bottini, Gary Sousa, Carl Harral, Ivan Broderick, Dave Vogel.

FISH PROTECTION SCREENS

Self-Cleaning Pump Intake System

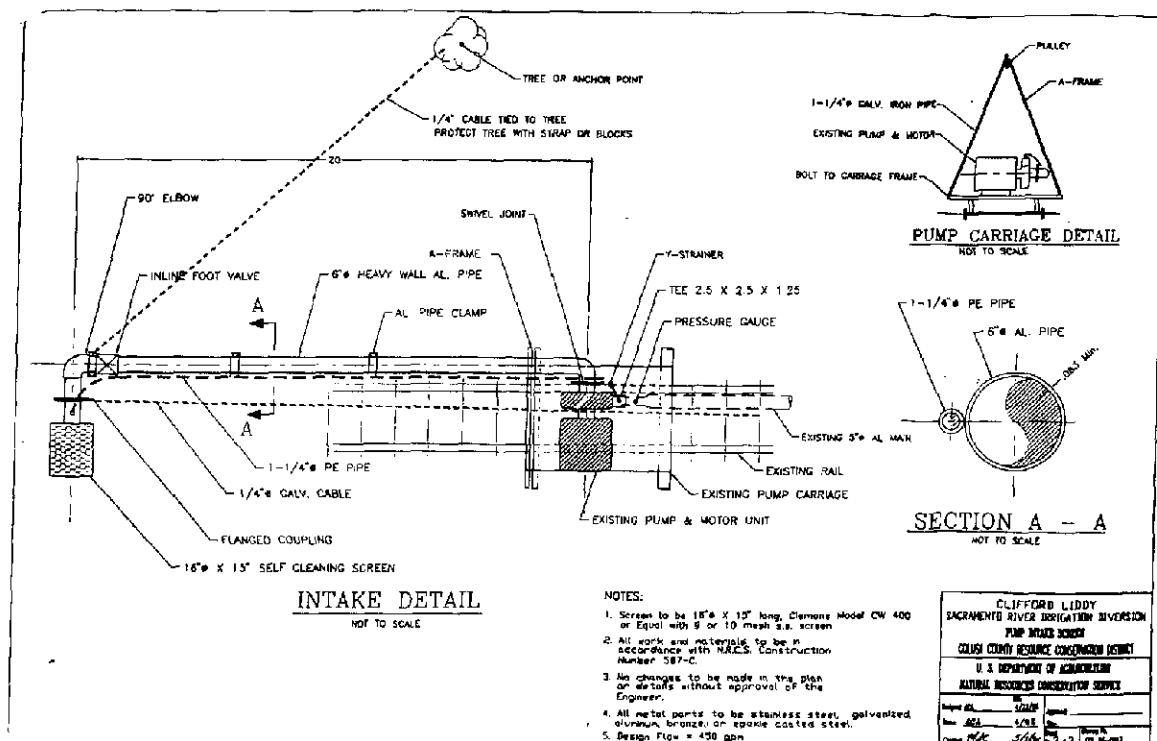
System Flow: 40 C.F.S. Diversion (1800 U.S. gpm)

Screen Size: 80-inch diameter x 93-inch length (each)



I-001570

I-001570



3-Year

Costs and Schedule to Implement Program:

CALFED funding will only be a part of the overall project. Two prior phases have already been funded, and are underway. This funding will allow expansion of the project, thus allowing the screening of additional screens. Additional funding will be sought as there are over 400 diversions alone in the Sacramento River that need to be screened. This part of the project represents just a part of the major commitment FWA intends to make to help farmers screen their pumps.

a) Budget: (Detailed Budget-see attached)

CALFED BAY-DELTA PROGRAM

Project Phase and Task	Direct Labor Hours	Direct Salary and Benefits*	Overhead Labor (General Admin and fee)	Service Contracts	Material and Acquisition Contracts (Includes 1 & 2)*	Misc. and other Direct Costs	Total Cost
Project Mgt. - Includes Expansion			\$547,207				\$547,207
Screen Design & Installation				\$150,000	\$610,000		\$760,000
Monitor				\$50,000			\$50,000

* Cost of Screens includes all labor, materials, and permits.

b) Scheduled Milestones and Timeline:

Small Fish Screen Project on the Sacramento River Timeline & Milestones - 7/10/97

	YEAR 1 1998 JFMAMJJASOND	YEAR 2 1999 JFMAMJJASOND	YEAR 3 2000 JFMAMJJASON
OUTREACH/ SIGN-UPS	<-----	----->*1	
SCREEN DESIGN & INSTALLATION	<-----	----->*2	
MONITOR		<-----	----->*3
EXPANSION	<-----	-----	----->

*1 - Payments: Monthly *2 - Payment upon completion of each project site. *3 - Payment upon completion of each project site.

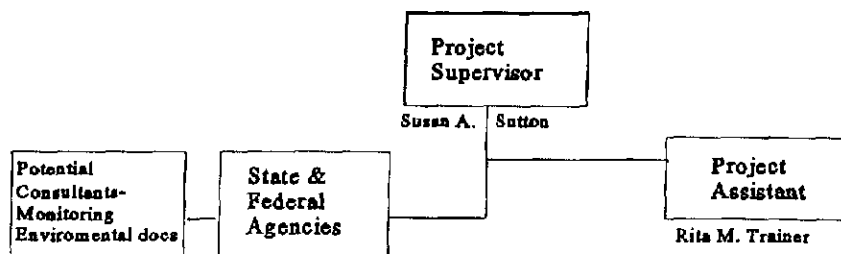
<u>Milestone #</u>	<u>Date</u>	<u>Action</u>
1	1/98	Begin Project
2	6/98	Begin Screen Design & Installation
3	6/98	Begin Expansion
4	1/99	Begin Monitoring

c) Third Party Impacts:

There will be no negative third party impacts to this project. This project will bring employment to the local area with screen manufacturing, and installation as well as long term support for the fishing industry.

v. Applicant Qualifications:

Project Organization



FWA will be the Project Manager of the Fish Screen Project. FWA will coordinate the efforts with cooperating agencies, and consultants to identify landowners, screen diversions, monitor the screens, and begin project expansion. Specific responsibilities are outlined under the project description.

Consultants will include specialists in the field of computer technology, enviromental documents (if needed), and fish screen monitoring and evaluation.

Biosketches:

Susan A. Sutton - Farmer, Education, Counselor, Project Manager,
Educator: MS, PPS, BA

Founded FWA in 1991 to educate people about rural issues. As president has played a major role in outreach, management, issues identification and spokesperson. Key accomplishments: started fishermen/farmer

coalition; initiated concept of Spring-run coalition with fishermen and local stakeholders; pursued and/or supported over \$129 million in funding for fish population enhancement and water diversions; facilitated meetings with agency personnel and local Boards of Supervisors; initiated, set up, and facilitated FFFC (Fish, Farm, Forest Communities.) Past educator, and school counselor, elementary through college level. Worked for nine years in various capacities for Del Monte Corporation, San Francisco from customer relations, to product management. Responsibilities included overall management of Brands from development of marketing plans, to financial accountability, introduction of new product lines, and promotions including advertising campaigns.

Rita M. Trainer - Office Manager

As the office manager for FWA she has proven her ability to handle multiple projects, stay organized and keep focused in order to meet deadlines. Proficient in word processing such as Word Perfect and Word. Has basic understanding of Dbase, Quicken and Quickbooks, Internet, and desktop publishing. Knows both DOS and windows environment. Past experience includes working for three years for Beduhn Accounting and three years at Wells Fargo Bank. Job responsibilities included data input, assisting in tax preparation, bookkeeping, and working with the public. Prior to this she worked for four years at Sears Photography Studio as a photographer, working in sales, and completing the daily, and monthly sales reports.

VI. Compliance with standard terms and conditions. See attached.

CAL-FED BAY DELTA PROGRAM 7/24/97

	Annual Year 1	Annual Year 2	Annual Year 3	<u>TOTAL</u>
<u>PERSONNEL</u>				
<u>Project Supervisor</u> (7hrs/day)(4days/wk)(48wks)(\$40/hr)	\$53,760	\$53,760	\$53,760	\$161,280
<u>Special Project Coordinator</u> (7hrs/day)(4days/wk)(16wks)\$35/hr)	\$15,680	\$15,680	\$15,680	\$47,040
<u>Office Personnel</u> (7hrs/day)(5days/wk)(48wks)(\$15/hr)	\$25,200	\$25,200	\$25,200	\$75,600
(7hrs/day)(5days/wk)(8wks)(\$5/hr)	\$1,400	\$1,400	\$1,400	\$4,200
<u>SUBTOTAL PERSONNEL</u>	\$96,040	\$96,040	\$96,040	\$288,120
Benefits @ 30% (Includes SSI, Workman's comp., SDI etc.)	\$28,812	\$28,812	\$28,812	\$86,436
<u>TOTAL PERSONNEL</u>	\$124,852	\$124,852	\$124,852	\$374,556
 <u>OTHER EXPENSES</u>				
<u>Transportation</u> (120days)(150mi/day)(\$.30/mi)	\$5,400	\$5,400	\$5,400	\$16,200
<u>Computer Services</u>				
Internet Access (\$30/mo)(12/mo)	\$360	\$360	\$360	\$1,080
Internet Updates - Home Page (\$300/mo)(12/mo)	\$3,600	\$3,600	\$3,600	\$10,800
Phone (Dedicated Line) (\$100/mo)(12/mo)	\$1,200	\$1,200	\$1,200	\$3,600
<u>Computer & Printer</u>	\$3,900	\$0	\$0	\$3,900
<u>Legal Consultation</u>	\$6,000	\$6,000	\$6,000	\$18,000
<u>Accounting</u>				
CPA	\$4,000	\$4,000	\$4,000	\$12,000
ACCT	\$5,000	\$5,000	\$5,000	\$15,000
<u>Printing</u>	\$3,000	\$3,000	\$3,000	\$9,000
<u>Supplies</u>				
Paper, Toner, etc.	\$3,000	\$3,000	\$3,000	\$9,000
Misc. Supplies	\$2,000	\$2,000	\$2,000	\$6,000
<u>Equipment Maintenance</u>	\$1,500	\$1,500	\$1,500	\$4,500
<u>Building & Rent</u> (\$175/mo)(12mo)	\$2,100	\$2,100	\$2,100	\$6,300
<u>Utilities</u> (\$200/mo)(12mo)	\$2,400	\$2,400	\$2,400	\$7,200

CAL-FED BAY DELTA PROGRAM 7/24/97

	Annual Year 1	Annual Year 2	Annual Year 3	TOTAL
Postage	\$3,000	\$3,000	\$3,000	\$9,000
Telephone	\$3,000	\$3,000	\$3,000	\$9,000
Liability Insurance	\$3,000	\$3,000	\$3,000	\$9,000
Conferences				
(4conf.)((\$350/conf.)(2people)	\$2,800	\$2,800	\$2,800	\$8,400
(150mi)(4conf.)(\$.30/mi)	\$180	\$180	\$180	\$540
Air Fair:(\$120)((2con)(2people)	\$480	\$480	\$480	\$1,440
Food:(\$25/day)(4/3daycon)(2people)	\$600	\$600	\$600	\$1,800
Hotel:(\$120/day)(8 days)	\$960	\$960	\$960	\$2,880
Equipment				
1 Desk Chair	\$210	\$0	\$0	\$210
1 Overhead Projector	\$500	\$0	\$0	\$500
6 Shelving Units (@\$100)	\$600	\$0	\$0	\$600
2 Filing Cabinets (@\$250)	\$500	\$0	\$0	\$500
3 Desk Lamps (@\$37)	\$111	\$0	\$0	\$111
1 Portable Easel w/Board	\$190	\$0	\$0	\$190
1 Slide Projector w/Tray	\$650	\$0	\$0	\$650
Copier	\$5,250	\$0	\$0	\$5,250
SUBTOTAL OTHER EXPENSES	\$65,491	\$53,580	\$53,580	\$172,651
Environmental Consultation*	\$50,000	\$50,000	\$50,000	\$150,000
Monitoring Programs**	\$0	\$25,000	\$25,000	\$50,000
Screens***				
CALFED	\$0	\$140,000	\$260,000	\$400,000
Landowner	\$0	\$60,000	\$140,000	\$200,000
Permits (\$1000/screen)(10 screens)	\$0	\$10,000	\$0	\$10,000
Total Screens	\$0	\$210,000	\$400,000	\$610,000
TOTAL OTHER EXPENSES	\$115,491	\$338,580	\$528,580	\$982,651
OVERALL TOTALS	\$240,343	\$463,432	\$653,432	\$1,357,207
LESS LANDOWNER CONTRIBUTION				\$200,000
TOTAL REQUESTED****				\$1,157,207

*If F&G agree to be co-lead agency on environmental documents these funds can be put toward additional screens or returned to CALFED.

**If F&G agrees to do monitoring, these funds can be put toward screens or returned to CALFED.

***Based on 10 screens (Avg. 20 cfs)

Total number of screens may be doubled if matching funds are identified.

****Does not reflect pending in-kind contributions (year II) of \$60,000 from CF&G and \$80,000 from NF&WVF, awaiting confirmation of these funds.

NONDISCRIMINATION COMPLIANCE STATEMENT

COMPANY NAME

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

SUSAN A. SUTTON

OFFICIAL'S NAME

DATE EXECUTED

7/21/97

EXECUTED IN THE COUNTY OF

Colusa

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

President
Family Water Alliance

Item 11

Agreement No. _____

Exhibit _____

NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY
BIDDER AND SUBMITTED WITH BID FOR PUBLIC WORKS

STATE OF CALIFORNIA)

)ss

COUNTY OF Colusa)

Susan A. Sutton

(name)

, being first duly sworn, deposes and

says that he or she is President

(position title)

of

Family Water Alliance

(the bidder)

the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

DATED: July 21, 1997

By

Susan A. Sutton

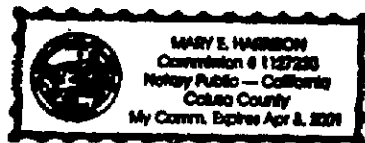
(person signing for bidder)

Subscribed and sworn to before me on

July 21, 1997

Mary E. Harrison

(Notary Public)



(Notarial Seal)